



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------------------------|-------------|----------------------|-------------------------|------------------|
| 10/014,147                        | 12/07/2001  | Frank Blecha         | 23625-DIV1              | 7389             |
| 7590 09/16/2004                   |             |                      | EXAMINER                |                  |
| Tracey S. Truitt                  |             |                      | LUKTON, DAVID           |                  |
| Suite 400<br>2405 Grand Boulevard |             |                      | ART UNIT                | PAPER NUMBER     |
| Kansas City, MO 64108             |             |                      | 1653                    |                  |
|                                   |             |                      | DATE MAILED: 09/16/2004 | 1                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)  |  |  |  |  |
|---|--|---|--|--|--|--|
|   | 10/014,147   | BLECHA ET AL.   |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit  |  |  |  |  |
|   | David Lukton   | 1653  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address   |  |   |  |  |  |  |
| Period for Reply  A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statt Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | I.  1.136(a). In no event, however, may  ply within the statutory minimum of the discount of t | a reply be timely filed  hirty (30) days will be considered timely.  ONTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133). |  |  |  |  |
| Status  |  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on 21   |  |   |  |  |  |  |
| <u> </u>  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |   |  |  |  |  |
|   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |
| Disposition of Claims   |  |   |  |  |  |  |
| 4) ☐ Claim(s) 1-8 is/are pending in the application 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and   | awn from consideration.  |   |  |  |  |  |
| Application Papers  |  |   |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |  |   |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |   |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list  | nts have been received.  Ints have been received in  Into rity documents have been  Interest au (PCT Rule 17.2(a)).  | Application No en received in this National Stage   |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  | 4) 🗔 Intonion  | Summany /PTO 413)   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date   |  |   |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date   | f Informal Patent Application (PTO-152)  |   |  |  |  |  |

Applicants' election of Group 1 (claims 1-8) is acknowledged, as are the elected species (SEQ ID NO:1 as the peptide, neutrophil as the type of leukocyte, and endothelium as the location to which the leukocyte is attracted).

 $\Diamond$ 

Claims 1-8 are rejected under 35 U.S.C. §112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 1 recites "capable of attracting", thus rendering the claims indefinite as to whether the attraction ever takes place. A related matter concerns the "location". Suppose that the "location" is a given position in a petri dish. Can a leukocyte be attracted to the position in the petri dish if no leukocyte is present in the dish?
- In claim 2, the phrase "Sequence ID No. 1" is used. The "No" should be followed by a colon, rather than a period. The following is suggested:

SEQ ID NO: 1.

• In claim 3, the phrase "Sequence ID Nos. 1, 2, 5, 6..." is used. The "No" should be followed by a colon, rather than a period. The following is suggested:

SEQ ID NOS: 1, 2, 5, 6...

 $\diamondsuit$ 

The following is a quotation of 35 USC. §103 which forms the basis for all obviousness rejections set forth in the Office action:

Serial No. 10/014,147 Art Unit 1653

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made, absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claims 1, 2, 5-7 are rejected under 35 U.S.C. §103 as being unpatentable over Yoshimura (USP 6,090,795).

Yoshimura discloses that the following peptide is chemotactic for monocytes:

X-Pro-Asp-Ala-Ile-Asn-Ala-Pro-Val-Thr-Cys-Cys-Tyr-Asn-Phe-Thr-Asn-Arg-Lys-Ile-Ser-Val-Gln-Arg-Leu-Ala-Ser-Tyr-Arg-Arg-Ile-Thr-Ser-Ser-Lys-Cys-Pro-Lys-Glu-Ala-Val-Ile-Phe-Lys-Thr-Ile-Val-Ala-Lys-Glu-Ile-Cys-Ala-Asp-Pro-Lys-Gln-Lys-Trp-Val-Gln-Asp-Ser-Met-Asp-His-Leu-Asp-Lys-Gln-Thr-Gln-Thr-Pro-Lys-Thr

Instant claim 2 is rejected because SEQ ID NO: 1 (instant application) is a peptide which contains the dipeptide subsequence Arg-Arg. SEQ ID NO: 1 (instant application) also contains the dipeptide subsequence Arg-Ile. Given that the dipeptide subsequence Arg-Arg is "included" in SEQ ID NO: 1 (instant application), claim 2 is rendered obvious.

Thus, the claims are rendered obvious.

 $\diamondsuit$ 

Claims 1, 4-8 are rejected under 35 U.S.C. §103 as being unpatentable over Geczy (USP 5,731,166).

Geczy discloses (col 7, line 51) that the peptides of SEQ ID NOS: 2 and 3 are chemotactic for neutrophils. Thus, the claims are rendered obvious.

 $\diamondsuit$ 

Claims 1, 2, 4-8 are rejected under 35 U.S.C. §103 as being unpatentable over Carney (USP 6184342).

Carney discloses that the peptides of SEQ ID NOS: 1 - 4 are chemotactic for neutrophils. For example SEQ ID NO:1 (of the patent) is the following:

Claim 2 is also rejected. SEQ ID NO: 1 (instant application) is the following:

As is evident, the peptide of the instant application contains the tripeptide Arg-Arg-Pro.

Thus, the claims are rendered obvious.

 $\diamondsuit$ 

Claim 1 is rejected under 35 U.S.C. §103 as being unpatentable over Auron (USP

5,681,933). Auron discloses that IL-1 is chemotactic for leukocytes, and provides the amino acid sequence thereof.

Thus, the claim is rendered obvious.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lukton whose telephone number is 571-272-0952. The examiner can normally be reached Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber, can be reached at 571-272-0925. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

DANIE LURTON
PATENT EXAMENER
GROUP 1800